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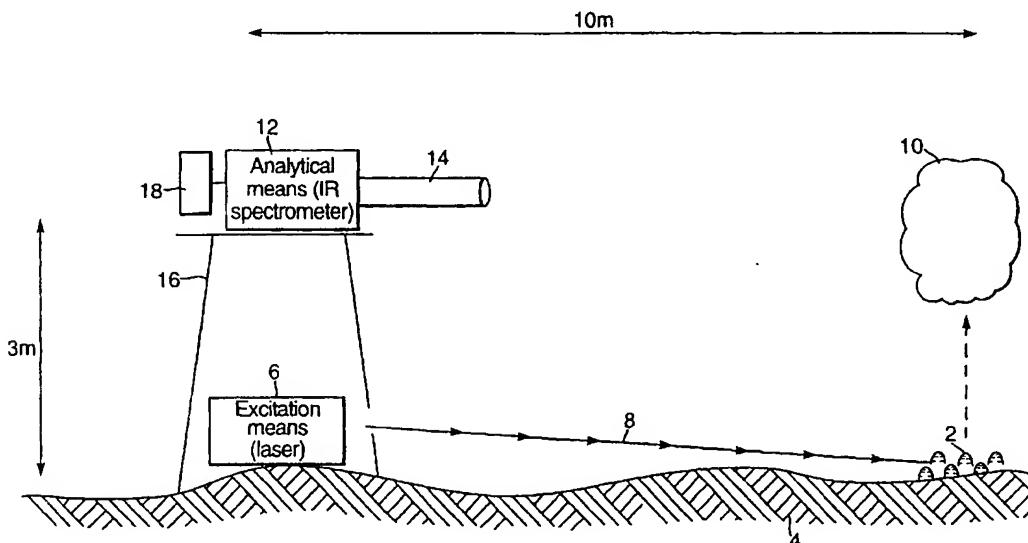
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(54) Title: METHOD AND APPARATUS FOR STAND-OFF CHEMICAL DETECTION



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(57) **Abstract:** A method, suitable for stand off analysis of a sample (2), comprising: (i) using an excitation means (6) to vapourise the sample (2) thereby producing a vapour plume (10) of molecular species; and (ii) using an analytical means (12) to analyse the molecular species within the vapour plume (10) wherein the analytical means (12) analyses the molecular emission spectra of the vapour plume (10). The invention also relates to a kit and an apparatus for use with the same.